

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017166**Date Inspected:** 25-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai,China**CWI Name:** Mr.Xu Tao/Geng wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing:-

Bay #19

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as Bike Path 008. The weld designation reviewed is as follows:

BK004A8-008-061,065,076,082,063,070,078,072,073

BK004A5-008-008,005

BK004A3-008-058,059

BK004A2-008-009,010

BK004A4-008-047,048

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Bike Path 008 this Quality Assurance Inspector (QA) discovered the following issues:

- One Longitudinal linear indication in the weld measuring approximately 15mm in length.
- The weld is identified as BK004A6-008-080.

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## WELDING INSPECTION REPORT

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-The weld is partial joint penetration (PJP), joining the End Diaphragm plate identified as BKX11G to the Deck Plate identified as BKPL1A.

-This weld joint is designated as Non-Seismic performance critical (Non-SPCM) weld member.

-The indication is clearly marked on the material near the weld.

-The OBG Bike Path 008 is located in Bay # 19.

The Notice of Witness Inspection Number (NWIT) is 006765. The indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel.

For further information, please see the attached pictures below.

### Visual Testing:-

This QA inspector performed random visual testing of the area previously tested and accepted by ZPMC Quality Control Personnel. The member is identified as Bike Path 008. The weld designation reviewed is as follows:

BK004A3-008-065,100,067,101,068,102,069,103,070,104,071,105

BK004A4-008-080,100,083,102,082,101,085,103,086,104,087,105

### In process Inspection

#### Bay #19

This QA Inspector observed the following work in progress:

FCAW in the 1G position for the Bike Path, weld No: BK004A2-012-018. The welder is identified as #062808.

ZPMC CWI is identified as Mr.Xu Tao.The welding variables recorded by QC appear to comply with

WPS-B-T-2231-B-L1B-F-1.

This QA Inspector observed the following work in progress:

FCAW in the 4F position for the Bike Path, weld No: BK004A5-011-117. The welder is identified as #208632.

ZPMC CWI is identified as Mr. Ma qian li. The welding variables recorded by QC appear to comply with

WPS-B-T-2134.

#### Bay #14

This QA inspector observed the following work in progress:

SMAW welding of Bottom Plates BP3075, BP3074, BP3073 and BP3072 located on OBG Segment 13West Line.

Welder is identified as #045196. ZPMC CWI is identified as Mr. Geng Wei. Welding was performed according to

the Critical weld repair report B-CWR1909 .The welding variables recorded by QC appeared to comply with the

WPS-345-SMAW-1G(1F)-FCM-Repair.

This QA Inspector observed the following work in progress:

FCAW in the 2G position for the OBG Segment 13CE, weld No: VP3007-001-011. The welder is identified as

#070478. ZPMC QC is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appear to comply

with WPS-B-T-2232-TC-U4B-F.

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## WELDING INSPECTION REPORT

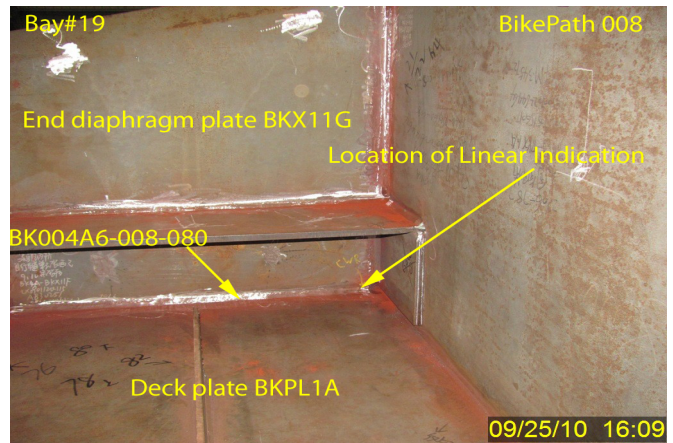
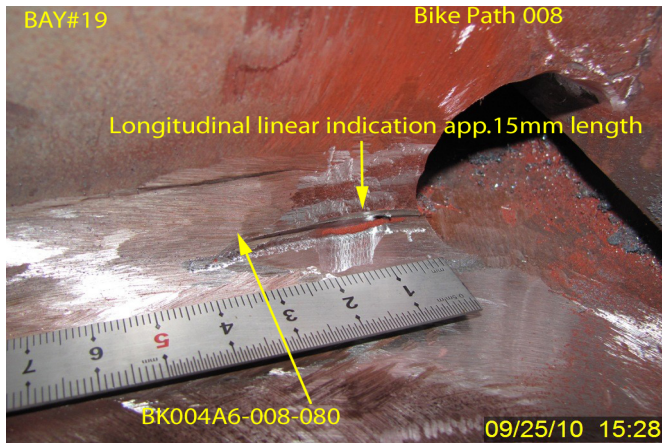
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This QA Inspector observed the following work in progress:

FCAW in the 2G position for the OBG Segment 13AE, weld No: VP3005-001-025. The welder is identified as #066763. ZPMC QC is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-TC-U4B-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No Relevant Conversation.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Pillai,Pandaram

Quality Assurance Inspector

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**Reviewed By:** McClendon,Timothy

QA Reviewer